

SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier: NON-CHLORINATED BRAKE CLEANER- SP4655

Other means of identification

SDS number: RE1000040219

Recommended restrictions

Recommended use: Cleaner

Restrictions on use: Not known.

Manufacturer Information

Manufactured For

Company Name: ASSOCIATION OF INDEPENDENT OIL DISTRIBUTORS
Address: 203 W MAIN STREET
MONTROSE, CO 81402-1861
US
Telephone: 800-313-2463

Emergency telephone number: 1-866-836-8855

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable liquids Category 2

Health Hazards

Skin Corrosion/Irritation Category 2
Serious Eye Damage/Eye Irritation Category 2A
Carcinogenicity Category 2
Toxic to reproduction Category 2
Specific Target Organ Toxicity - Category 3
Single Exposure (Narcotic effect.)
Aspiration Hazard Category 1

Environmental Hazards

Acute hazards to the aquatic environment Category 2

Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement:	Highly flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. Toxic to aquatic life.
Precautionary Statements	
Prevention:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof [electrical/ventilating/lighting] equipment. Use non-sparking tools. Take action to prevent static discharges. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment.
Response:	IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. If skin irritation occurs: Get medical advice/attention. IF SWALLOWED: Immediately call a POISON CENTER/doctor Do NOT induce vomiting. Call a POISON CENTER/doctor if you feel unwell. Specific treatment (see on this label). Take off contaminated clothing. In case of fire: Use... to extinguish.
Storage:	Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed.
Disposal:	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Hazard(s) not otherwise classified (HNOC):	Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
2-Propanone	67-64-1	50 - <100%
Naphtha (petroleum), hydrotreated light	64742-49-0	10 - <25%
Heptane	142-82-5	5 - <10%
Benzene, dimethyl-	1330-20-7	5 - <10%
Benzene, ethyl-	100-41-4	1 - <5%
Cyclohexane, methyl-	108-87-2	1 - <5%
Benzene, methyl-	108-88-3	0.1 - <1%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The exact concentration has been withheld as a trade secret.

4. First-aid measures

Description of necessary first-aid measures

Inhalation:	Move to fresh air.
Skin Contact:	Take off immediately all contaminated clothing. Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Get medical attention.
Eye contact:	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
Ingestion:	Call a physician or poison control center immediately. Rinse mouth. Never give liquid to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Personal Protection for First-aid Responders:	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Most important symptoms/effects, acute and delayed

Symptoms:	No data available.
Hazards:	No data available.

Indication of immediate medical attention and special treatment needed

Treatment:	Symptoms may be delayed.
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5. Fire-fighting measures

General Fire Hazards:	Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.
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Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Use fire-extinguishing media appropriate for surrounding materials.
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Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.
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Specific hazards arising from the chemical:	Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause a flash fire or ignite explosively. Prevent buildup of vapors or gases to explosive concentrations.
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Special protective equipment and precautions for firefighters

Special fire fighting procedures:	No data available.
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Special protective equipment for fire-fighters:	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind. See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.
Accidental release measures:	Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Dike for later disposal.
Methods and material for containment and cleaning up:	Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. In case of leakage, eliminate all ignition sources. Dike far ahead of larger spills for later disposal.
Environmental Precautions:	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation):	No data available.
Safe handling advice:	Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with eyes. Wash hands thoroughly after handling. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Take precautionary measures against static discharges. Avoid contact with skin.
Contact avoidance measures:	No data available.

Storage

Safe storage conditions:	Store locked up. Store in a well-ventilated place. Store in a cool place.
Safe packaging materials:	No data available.
Storage Temperature:	No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values		Source
2-Propanone	STEL	1,000 ppm	2,400 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	PEL	1,000 ppm	2,400 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	TWA	250 ppm		US. ACGIH Threshold Limit Values, as amended
	TWA	750 ppm	1,800 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Naphtha (petroleum), hydrotreated light	STEL	500 ppm		US. ACGIH Threshold Limit Values, as amended
	REL	250 ppm	590 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	REL	100 ppm	400 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	TWA	100 ppm	400 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Heptane	PEL	100 ppm	400 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	TWA	400 ppm	1,600 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	REL	85 ppm	350 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	PEL	500 ppm	2,000 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended

	STEL	500 ppm	2,000 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	TWA	400 ppm		US. ACGIH Threshold Limit Values, as amended
	STEL	500 ppm		US. ACGIH Threshold Limit Values, as amended
	Ceil_ Time	440 ppm	1,800 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Benzene, dimethyl-	TWA	100 ppm	435 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	TWA	100 ppm		US. ACGIH Threshold Limit Values, as amended
	PEL	100 ppm	435 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	STEL	150 ppm	655 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	STEL	150 ppm		US. ACGIH Threshold Limit Values, as amended
	STEL	150 ppm	655 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	REL	100 ppm	435 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Benzene, ethyl-	STEL	125 ppm	545 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	REL	100 ppm	435 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	PEL	100 ppm	435 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	STEL	125 ppm	545 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	TWA	100 ppm	435 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	TWA	20 ppm		US. ACGIH Threshold Limit Values, as amended
Cyclohexane, methyl-	PEL	500 ppm	2,000 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	TWA	400 ppm	1,600 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	TWA	400 ppm		US. ACGIH Threshold Limit Values, as amended
	REL	400 ppm	1,600 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Benzene, methyl-	STEL	150 ppm	560 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	REL	100 ppm	375 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	TWA	100 ppm	375 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	Ceiling	300 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000), as amended
	TWA	20 ppm		US. ACGIH Threshold Limit Values, as amended
	TWA	200 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000), as amended
	MAX. CONC	500 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000), as amended
	STEL	150 ppm	560 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Hexane	TWA	50 ppm	180 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	PEL	500 ppm	1,800 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	REL	50 ppm	180 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	TWA	50 ppm		US. ACGIH Threshold Limit Values, as amended
Cyclohexane	TWA	100 ppm		US. ACGIH Threshold Limit Values, as amended
	TWA	300 ppm	1,050 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	REL	300 ppm	1,050 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	PEL	300 ppm	1,050 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
Benzene	REL	0.1 ppm		US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	TWA	1 ppm		US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	Ceiling	25 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000), as amended
	TWA	0.5 ppm		US. ACGIH Threshold Limit Values, as amended
	STEL	2.5 ppm		US. ACGIH Threshold Limit Values, as amended
	STEL	5 ppm		US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended
	OSHA ACT	0.5 ppm		US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended
	TWA	10 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000), as amended
	MAX. CONC	50 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000), as amended
	STEL	5 ppm		US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	TWA	1 ppm		US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended
	STEL	1 ppm		US. NIOSH: Pocket Guide to Chemical Hazards, as amended

Biological Limit Values

Chemical Identity	Exposure Limit Values	Source
2-Propanone (acetone: Sampling time: End of shift.)	25 mg/l (Urine)	ACGIH BEL
Benzene, dimethyl- (Methylhippuric acids: Sampling time: End of shift.)	1.5 g/g (Creatinine in urine)	ACGIH BEL
Benzene, ethyl- (Sum of mandelic acid and phenylglyoxylic acid: Sampling time: End of shift.)	0.15 g/g (Creatinine in urine)	ACGIH BEL
Benzene, methyl- (toluene: Sampling time: End of shift.)	0.03 mg/l (Urine)	ACGIH BEL
Benzene, methyl- (o-Cresol, with hydrolysis: Sampling time: End of shift.)	0.3 mg/g (Creatinine in urine)	ACGIH BEL
Benzene, methyl- (toluene: Sampling time: Prior to last shift of work week.)	0.02 mg/l (Blood)	ACGIH BEL
Hexane (2,5-Hexanedion, without hydrolysis: Sampling time: End of shift.)	0.5 mg/l (Urine)	ACGIH BEL
Benzene (S-Phenylmercapturic acid: Sampling time: End of shift.)	25 µg/g (Creatinine in urine)	ACGIH BEL
Benzene (t,t-Muconic acid: Sampling time: End of shift.)	500 µg/g (Creatinine in urine)	ACGIH BEL

Exposure guidelines

Hexane	US. ACGIH Threshold Limit Values, as amended	Can be absorbed through the skin.
Benzene	US. ACGIH Threshold Limit Values, as amended	Can be absorbed through the skin.

Appropriate Engineering Controls No data available.

Individual protection measures, such as personal protective equipment

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin Protection

Hand Protection: No data available.

Skin and Body Protection: Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

Hygiene measures: Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Avoid contact with eyes. When using do not smoke. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Wash contaminated clothing before reuse. Avoid contact with skin.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	No data available.
Odor:	No data available.
Odor Threshold:	No data available.
pH:	No data available.
Freezing point:	No data available.
Boiling Point:	Estimated 71.59 °C
Flash Point:	Estimated -5.13 °C
Evaporation Rate:	No data available.
Flammability (solid, gas):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density (air=1):	No data available.
Density:	No data available.
Relative density:	No data available.
Solubility in Water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Self Ignition Temperature:	No data available.
Decomposition Temperature:	No data available.
Kinematic viscosity:	No data available.
Dynamic viscosity:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Heat, sparks, flames.
Incompatible Materials:	No data available.
Hazardous Decomposition Products:	No data available.

11. Toxicological information

Information on likely routes of exposure

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral Product:	Not classified for acute toxicity based on available data.
Dermal Product:	ATEmix: 23,014.96 mg/kg
Inhalation Product:	ATEmix: 156.92 mg/l Vapour

Repeated dose toxicity

Product:	No data available.
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Components:

2-Propanone	NOAEL (Rat(Male), Oral, 13 Weeks): 10,000 ppm(m) Oral Experimental result, Key study
Naphtha (petroleum), hydrotreated light	NOAEL (Rat(Female, Male), Inhalation): 10,000 mg/m3 Inhalation Experimental result, Key study LOAEL (Rat(Female, Male), Oral, 13 Weeks): 1,250 mg/kg Oral Read-across based on grouping of substances (category approach), Key study NOAEL (Rat(Female, Male), Dermal, 28 d): > 375 mg/kg Dermal Experimental result, Supporting study

Heptane	NOAEL (Rat(Male), Inhalation): 12,470 mg/m3 Inhalation Experimental result, Key study
Benzene, dimethyl-	NOAEL (Rat(Female), Oral, 90 d): 150 mg/kg Oral Experimental result, Key study
Benzene, ethyl-	NOAEL (Mouse(Female, Male), Inhalation, 104 Weeks): 75 ppm(m) Inhalation Experimental result, Key study NOAEL (Rat(Female, Male), Oral, 28 d): 75 mg/kg Oral Experimental result, Key study
Cyclohexane, methyl-	NOAEL (Rat(Female, Male), Inhalation): 1,600 mg/m3 Inhalation Experimental result, Key study LOAEL (Rat(Female, Male), Oral, 28 d): 1,000 mg/kg Oral Experimental result, Key study NOAEL (Rat(Female, Male), Oral, 28 d): 250 mg/kg Oral Experimental result, Key study
Benzene, methyl-	LOAEL (Rat(Female, Male), Oral, 13 Weeks): 1,250 mg/kg (Target Organ(s): Liver, Kidney) Oral Experimental result, Key study NOAEL (Rat(Female, Male), Inhalation): 625 ppm(m) Inhalation Experimental result, Key study NOAEL (Rat(Female, Male), Inhalation - vapor): 2,355 mg/l Inhalation Experimental result, Key study

Skin Corrosion/Irritation

Product: No data available.

Components:

2-Propanone	in vivo (Rabbit): Not irritant
Naphtha (petroleum), hydrotreated light	Assessment Non-Irritating
Heptane	In vitro (Human): not corrosive
Benzene, dimethyl-	in vivo (Rabbit): Irritating
	in vivo (Rabbit): Moderate irritant estimated Irritating.
Cyclohexane, methyl-	estimated Irritating.
Benzene, methyl-	in vivo (Rabbit): Irritating

Serious Eye Damage/Eye Irritation

Product: No data available.

Components:

2-Propanone	Irritating. Rabbit, 24 hrs: Minimum grade of severe eye irritant
Naphtha (petroleum), hydrotreated light	Rabbit, 24 - 72 hrs: Not irritating
Heptane	Rabbit, 24 - 72 hrs: Not irritating
Benzene, dimethyl-	Rabbit, 1 hrs: Slightly irritating (Not Classified)
Cyclohexane, methyl-	Rabbit, 0.5 - 168 hrs: Not irritating
Benzene, methyl-	Rabbit, 24 - 72 hrs: Not irritating

Respiratory or Skin Sensitization

Product: No data available.

Components:

2-Propanone	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Naphtha (petroleum), hydrotreated light	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Heptane	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Benzene, ethyl-	Skin sensitization:, in vivo (Human): Non sensitising
Cyclohexane, methyl-	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Benzene, methyl-	Skin sensitization:, in vivo (Guinea pig): Non sensitising

Carcinogenicity

Product: No data available.

Components:

Cyclohexane, methyl-	May cause cancer.
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IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Benzene, ethyl- Overall evaluation: 2B. Possibly carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens:

Benzene, ethyl- Overall evaluation: 2B. Possibly carcinogenic to humans.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Components:

Benzene, methyl- Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Components:

2-Propanone Inhalation - vapor: Narcotic effect. - Category 3 with narcotic effects.

Heptane Narcotic effect. - Category 3 with narcotic effects.

Cyclohexane, methyl- Inhalation - vapor: Narcotic effect. - Category 3 with narcotic effects.

Benzene, methyl- Inhalation - vapor: Narcotic effect. - Category 3 with narcotic effects.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Components:

Benzene, ethyl- Category 2

Cyclohexane, methyl- Category 1

Benzene, methyl- Category 2

Target Organs

Specific Target Organ Toxicity - Single Exposure: Narcotic effect.

Aspiration Hazard

Product: No data available.

Components:

Naphtha (petroleum), hydrotreated light May be fatal if swallowed and enters airways.

Heptane May be fatal if swallowed and enters airways.

Benzene, ethyl- May be fatal if swallowed and enters airways.

Cyclohexane, methyl- May be fatal if swallowed and enters airways.

Benzene, methyl- May be fatal if swallowed and enters airways.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Components:

2-Propanone	LC 50 (Oncorhynchus mykiss, 96 h): 5,540 mg/l Experimental result, Key study
Naphtha (petroleum), hydrotreated light	LC 50 (96 h): 8.41 mg/l Experimental result, Key study
Heptane	LC 50 (Mozambique tilapia (Tilapia mossambica), 96 h): 375 mg/l Mortality
Benzene, ethyl-	LC 50 (Fathead minnow (Pimephales promelas), 96 h): 38.9 - 62.83 mg/l Mortality
Cyclohexane, methyl-	LC 50 (Oryzias latipes, 96 h): 2.07 mg/l Experimental result, Key study
Benzene, methyl-	LC 50 (Oncorhynchus kisutch, 96 h): 5.5 mg/l Experimental result, Key study

Aquatic Invertebrates

Product:

No data available.

Components:

2-Propanone	LC 50 (Daphnia pulex, 48 h): 8,800 mg/l Experimental result, Key study
Naphtha (petroleum), hydrotreated light	EC 50 (Daphnia magna, 48 h): 4.5 mg/l Experimental result, Key study
Heptane	EC 50 (Daphnia magna, 48 h): 1.5 mg/l Experimental result, Key study
Benzene, ethyl-	LC 50 (Water flea (Daphnia magna), 24 h): 57 - 100 mg/l Mortality
Benzene, methyl-	LC 50 (Water flea (Daphnia magna), 48 h): 54.6 - 174.7 mg/l Mortality LC 50 (Ceriodaphnia dubia, 2 d): 3.78 mg/l Experimental result, Key study

Chronic hazards to the aquatic environment:

Fish

Product:

No data available.

Components:

Naphtha (petroleum), hydrotreated light	NOAEL (Daphnia magna): 2.6 mg/l Other, Key study
Heptane	NOAEL (Oncorhynchus mykiss): 1.284 mg/l QSAR QSAR, Key study
Benzene, methyl-	NOAEL (Oncorhynchus kisutch): 1.39 mg/l Experimental result, Key study LOAEL (Oncorhynchus kisutch): 2.77 mg/l Experimental result, Key study

Aquatic Invertebrates

Product:

No data available.

Components:

2-Propanone	LOAEL (Daphnia magna): 2,212 mg/l Experimental result, Key study NOAEL (Daphnia magna): 2,212 mg/l Experimental result, Key study
Naphtha (petroleum), hydrotreated light	EC 50 (Daphnia magna): 10 mg/l Experimental result, Key study
Heptane	NOAEL (Daphnia magna): 0.17 mg/l Read-across based on grouping of substances (category approach), Key study EC 50 (Daphnia magna): 0.23 mg/l Read-across based on grouping of substances (category approach), Key study

Benzene, ethyl-	LC 50 (Ceriodaphnia dubia): 3.2 mg/l Other, Key study NOAEL (Ceriodaphnia dubia): 1 mg/l Other, Key study
Benzene, methyl-	LOAEL (Ceriodaphnia dubia): 2.76 mg/l Experimental result, Key study NOAEL (Ceriodaphnia dubia): 0.74 mg/l Experimental result, Key study

Toxicity to Aquatic Plants
Product:

No data available.

Persistence and Degradability

Biodegradation
Product:

No data available.

Components:

2-Propanone	90.9 % (28 d) Detected in water. Experimental result, Key study
Naphtha (petroleum), hydrotreated light	90.35 % (28 d) Detected in water. Experimental result, Supporting study
Heptane	70 % Detected in water. Experimental result, Key study
Benzene, dimethyl-	87.8 % Detected in water. Read-across from supporting substance (structural analogue or surrogate), Key study
Benzene, ethyl-	2.7 % Detected in water. Other, Supporting study 70 - 80 % (28 d) Detected in water. Experimental result, Key study
Cyclohexane, methyl-	> 0 % (28 d) Detected in water. Experimental result, Weight of Evidence study > 0 % (28 d) Detected in water. Experimental result, Weight of Evidence study
Benzene, methyl-	100 % (14 d) Detected in water. Experimental result, Weight of Evidence study 86 % Detected in water. Experimental result, Weight of Evidence study

BOD/COD Ratio
Product:

No data available.

Bioaccumulative potential
Bioconcentration Factor (BCF)
Product:

No data available.

Components:

2-Propanone	Haddock, adult, Bioconcentration Factor (BCF): 0.69 Aquatic sediment Experimental result, Not specified
Naphtha (petroleum), hydrotreated light	Bioconcentration Factor (BCF): 10 - 2,500 Aquatic sediment Estimated by calculation, Key study
Heptane	Bioconcentration Factor (BCF): 552 Aquatic sediment Estimated by calculation, Key study
Benzene, dimethyl-	Oncorhynchus mykiss, Bioconcentration Factor (BCF): > 7.6 - < 21.6 Aquatic sediment Experimental result, Key study
Benzene, ethyl-	Carassius auratus, Bioconcentration Factor (BCF): 15.5 Aquatic sediment Other, Supporting study
Cyclohexane, methyl-	Cyprinus carpio, Bioconcentration Factor (BCF): > 95 - < 321 Aquatic sediment Experimental result, Key study

Benzene, methyl- Leuciscus idus, Bioconcentration Factor (BCF): 90 Aquatic sediment
Experimental result, Key study

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Components:

Naphtha (petroleum), hydrotreated light Log Kow: > 2.4 - < 5.7 23 °C Yes Experimental result, Key study

Benzene, dimethyl- Log Kow: 2.77 - 3.15 No Not specified, Not specified

Benzene, ethyl- Log Kow: 3.13 - 3.14 No Other, Supporting study

Mobility in soil: No data available.

Components:

2-Propanone No data available.
Naphtha (petroleum), hydrotreated light No data available.
Heptane No data available.
Benzene, dimethyl- No data available.
Benzene, ethyl- No data available.
Cyclohexane, methyl- No data available.
Benzene, methyl- No data available.

Other adverse effects: Toxic to aquatic organisms.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Contaminated Packaging: No data available.

14. Transport information

DOT

UN Number: UN 1993
UN Proper Shipping Name: Flammable liquids, n.o.s. (Acetone)
Transport Hazard Class(es):
Class: 3
Label(s): —
EmS No.:
Packing Group: II
Special precautions for user: Not regulated.

IATA

UN Number: UN 1993
UN Proper Shipping Name: Flammable liquids, n.o.s. (Acetone)
Transport Hazard Class(es):
Class: 3
Label(s): —
Packing Group: II
Special precautions for user: Not regulated.
Other information
Passenger and cargo aircraft: Forbidden.
Cargo aircraft only: Forbidden.

IMDG

UN Number:	UN 1993
UN Proper Shipping Name:	Flammable liquids, n.o.s. (Acetone)
Transport Hazard Class(es)	
Class:	3
Label(s):	—
EmS No.:	
Packing Group:	II
Special precautions for user:	Not regulated.

15. Regulatory information**US Federal Regulations**

Restrictions on use: Not known.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

<u>Chemical Identity</u>	<u>OSHA hazard(s)</u>
Benzene	Flammability
	Cancer
	Aspiration
	Eye
	Blood
	Skin
	respiratory tract irritation
	Central nervous system

CERCLA Hazardous Substance List (40 CFR 302.4):

<u>Chemical Identity</u>
ACETONE
UNLISTED HAZARDOUS WASTES CHARACTERISTIC OF IGNITABILITY
XYLENE (MIXED)
ETHYLBENZENE
BENZENE, METHYL-
HEXANE
CYCLOHEXANE
BENZENE,HEXAHYDRO-
BENZENE

Superfund Amendments and Reauthorization Act of 1986 (SARA)**Hazard categories**

Flammable liquids, Skin Corrosion/Irritation, Serious Eye Damage/Eye Irritation, Carcinogenicity, Toxic to reproduction, Specific Target Organ Toxicity - Single Exposure, Aspiration Hazard, Static-accumulating flammable liquid

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

<u>Chemical Identity</u>	<u>% by weight</u>
Benzene, dimethyl-	1.0%
Benzene, ethyl-	0.1%

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

US State Regulations

US. California Proposition 65

For more information go to www.P65Warnings.ca.gov.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

2-Propanone
Naphtha (petroleum), hydrotreated light
Heptane
Benzene, dimethyl-
Benzene, ethyl-
Cyclohexane, methyl-

US. Massachusetts RTK - Substance List

Chemical Identity

Benzene

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

2-Propanone
Naphtha (petroleum), hydrotreated light
Heptane
Benzene, dimethyl-
Benzene, ethyl-
Cyclohexane, methyl-

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

International regulations

Montreal protocol

2-Propanone

Stockholm convention

2-Propanone

Rotterdam convention

2-Propanone

Kyoto protocol

Inventory Status:

Australia AICS	On or in compliance with the inventory
Canada DSL Inventory List	On or in compliance with the inventory
Canada NDSL Inventory	Not in compliance with the inventory.
Ontario Inventory	On or in compliance with the inventory
China Inv. Existing Chemical Substances	On or in compliance with the inventory
Japan (ENCS) List	On or in compliance with the inventory
Japan ISHL Listing	On or in compliance with the inventory
Japan Pharmacopoeia Listing	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI)	On or in compliance with the inventory
Mexico INSQ	On or in compliance with the inventory
New Zealand Inventory of Chemicals	On or in compliance with the inventory
Philippines PICCS	On or in compliance with the inventory
Taiwan Chemical Substance Inventory	On or in compliance with the inventory
US TSCA Inventory	On or in compliance with the inventory
EINECS, ELINCS or NLP	Not in compliance with the inventory.

16. Other information, including date of preparation or last revision

Issue Date: 04/01/2021

Revision Information: No data available.

Version #: 1.0

Further Information: No data available.

Disclaimer: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.